

SEQUENCE LISTING

<110> HAYES, PHILIP D.
GENTRY, DANIEL R.
VAN HORN, STEPHANIE

<120> AntRNA Synthetases MetRS

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<141> 2003-06-26

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<151> 2002-12-20

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Ser Leu Ser Ala Gly Asp Asp Ala Cys Asp Val Arg Ala Tyr Phe Thr
        35             40             45

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Thr Pro Ile Phe Tyr Val Asn Ala Ala Pro His Ile Gly His Leu Tyr

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55

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Ser Ala Leu Leu Ala Asp Ala Leu Cys Arg His Arg Arg Leu Arg Gly

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70

75

80

Pro Ser Thr Ala Ala Thr Arg Phe Ser Thr Gly Thr Asp Glu His Gly

85

90

95

Leu Lys Ile Gln Gln Ala Ala Ala Thr Ala Gly Leu Ala Pro Thr Glu

100

105

110

Leu Cys Asp Arg Val Ser Glu Gln Phe Gln Gln Leu Phe Gln Glu Ala

115

120

125

Gly Ile Ser Cys Thr Asp Phe Ile Arg Thr Thr Glu Ala Arg His Arg

130

135

140

Val Ala Val Gln His Phe Trp Gly Val Leu Lys Ser Arg Gly Leu Leu

145

150

155

160

Tyr Lys Gly Val Tyr Glu Gly Trp Tyr Cys Ala Ser Asp Glu Cys Phe

165

170

175

Leu Pro Glu Ala Lys Val Thr Gln Gln Pro Gly Pro Ser Gly Asp Ser

180

185

190

Phe Pro Val Ser Leu Glu Ser Gly His Pro Val Ser Trp Thr Lys Glu

195

200

205

Glu Asn Tyr Ile Phe Arg Leu Ser Gln Phe Arg Lys Pro Leu Gln Arg

210

215

220

Trp Leu Arg Gly Asn Pro Gln Ala Ile Thr Pro Glu Pro Phe His His

225

230

235

240

Val Val Leu Gln Trp Leu Asp Glu Glu Leu Pro Asp Leu Ser Val Ser

245

250

255

Arg Arg Ser Ser His Leu His Trp Gly Ile Pro Val Pro Gly Asp Asp

260

265

270

Ser Gln Thr Ile Tyr Val Trp Leu Asp Ala Leu Val Asn Tyr Leu Thr

275

280

285

Val Ile Gly Tyr Pro Asn Ala Glu Phe Lys Ser Trp Trp Pro Ala Thr

290

295

300

Ser His Ile Ile Gly Lys Asp Ile Leu Lys Phe His Ala Ile Tyr Trp

305

310

315

320

Pro Ala Phe Leu Leu Gly Ala Gly Met Ser Pro Pro Gln Arg Ile Cys

325

330

335

Val His Ser His Trp Thr Val Cys Gly Gln Lys Met Ser Lys Ser Leu

340

345

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Gly Asn Val Val Asp Pro Arg Thr Cys Leu Asn Arg Tyr Thr Val Asp

355

360

365

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Asp Tyr Tyr Asp Glu Lys Val Val Lys Leu Leu Asn Ser Glu Leu Ala
385 390 395 400

Asp Ala Leu Gly Gly Leu Leu Asn Arg Cys Thr Ala Lys Arg Ile Asn
405 410 415

Pro Ser Glu Thr Tyr Pro Ala Phe Cys Thr Thr Cys Phe Pro Ser Glu
420 425 430

Pro Gly Leu Val Gly Pro Ser Val Arg Ala Gln Ala Glu Asp Tyr Ala
435 440 445

Leu Val Ser Ala Val Ala Thr Leu Pro Lys Gln Val Ala Asp His Tyr
450 455 460

Asp Asn Phe Arg Ile Tyr Lys Ala Leu Glu Ala Val Ser Ser Cys Val
465 470 475 480

Arg Gln Thr Asn Gly Phe Val Gln Arg His Ala Pro Trp Lys Leu Asn
485 490 495

Trp Glu Ser Pro Val Asp Ala Pro Trp Leu Gly Thr Val Leu His Val
500 505 510

Ala Leu Glu Cys Leu Arg Val Phe Gly Thr Leu Leu Gln Pro Val Thr
515 520 525

Pro Ser Leu Ala Asp Lys Leu Leu Ser Arg Leu Gly Val Ser Ala Ser
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Glu Arg Ser Leu Gly Glu Leu Tyr Phe Leu Pro Arg Phe Tyr Gly His
545 550 555 560

Pro Cys Pro Phe Glu Gly Arg Arg Leu Gly Pro Glu Thr Gly Leu Leu
565 570 575

Phe Pro Arg Leu Asp Gln Ser Arg Thr Trp Leu Val Lys Ala His Arg
580 585 590

Thr